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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

IQBAL, KHAWAR

ART UNIT PAPER NUMBER

2686

DATE MAILED: 01/15/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/738,309

Applicant(s)

DOKKO, SEHJOON

Examiner

Khawar Iqbal

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3,5-9 are rejected under 35 U.S.C. 102(e) as being unpatentable by Basu et al (6097733).
3. Regarding claim 1 Basu et al teaches a method for allocating channels for radio data calls comprising (figs. 7-9):

receiving a data call connection request (col. 12, lines 24-35); determining a traffic attribute of the data call (col. 13, lines 4-20);

determining an occupied bandwidth of each of a plurality of channels of a transmission link occupied by other connected calls (col.2, lines 33-47, col. 3, lines 38-55); and

dynamically allocating the data call among the plurality of channels based on the traffic attribute and the occupied bandwidth (col.2, lines 33-47, col. 3, line38-col. 4, line 2).

Regarding claim 2 Basu et al teaches wherein a bandwidth of the data call is determined based on the traffic attribute and the bandwidth occupied by the other

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connected data calls is determined based on a number of other data calls and prescribed weight values of each of the other data calls (col. 2, lines 33-47, col. 3, line38-col. 4, line 2, col. 13, line 55-col. 14, lines 30).

Regarding claims 3 Basu et al teaches wherein the weight value is allocated in a unit form according to a rate of the bandwidth (col. 2, lines 33-47, col. 3, line38-col. 4, line 2, col. 13, line 55-col. 14, lines 30).

Regarding claim 5 Basu et al teaches wherein a mobile switching system subtracts an occupied channel bandwidth from a maximum allowable channel bandwidth to determine whether there is a minimum available bandwidth in each channel, and allocates the channel having the least occupied bandwidth if no channel has the minimum available bandwidth (col. 2, lines 33-47, col. 3, line38-col. 4, line 2, col. 13, line 55-col. 14, lines 30).

Regarding claim 6 Basu et al teaches wherein the maximum allowable bandwidth is 30 units (col. 2, lines 33-47, col. 3, line38-col. 4, line 2, col. 13, line 55-col. 14, lines 30).

Regarding claim 7 Basu et al teaches wherein a mobile switching system allocates a channel having the least available bandwidth if a requested bandwidth of the data call is greater than a prescribed bandwidth and the channel having an available bandwidth exists (col. 2, lines 33-47, col. 3, line38-col. 4, line 2, col. 7, lines 10-30, col. 13, line 55-col. 14, lines 30).

Regarding claim 8 Basu et al teaches wherein a mobile switching system allocates a channel having the least occupied bandwidth if a requested bandwidth of

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the data call is smaller than a prescribed reference bandwidth and the channel having an available bandwidth exists.

Regarding claim 9 Basu et al teaches wherein the traffic attribute is determined based on a service option (col. 2, lines 33-47, col. 3, line38-col. 4, line 2, col. 13, line 55-col. 14, lines 30).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 10,11,13-15,17-20, 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Basu et al (6097733) and further in view of Yee et al (20020114301).

Regarding claims 10,11,18 and 25 Basu et al teaches a channel allocation method for radio data calls, comprising (figs. 7-9):

receiving a data call connection request (col. 12, lines 24-35); allocating an available time slot and link (col. 13, lines 4-20);

determining a requested bandwidth based on a service option of a received data call (col.2, lines 33-47); defining a weight value of the data call in accordance with the requested bandwidth (col. 2, lines 33-47, col. 3, line38-col. 4, line 2, col. 13, line 55-col. 14, lines 30); and dynamically allocating an H.sub.0 channel on the link based on a number of connected data calls occupying each of a plurality of H.sub.0 channels and the weight value of each connected data call (col. 2, lines 33-47, col. 3, line38-col. 4,

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line 2, col. 13, line 55-col. 14, lines 30). Basu et al teaches communication system for providing multimedia and voice communications to wireless mobile units, has bandwidth allocator of wireless service interface to allocate bandwidth for communications. A system (100) comprises base station (102) coupled to base station controller, with a bandwidth to provide wireless coverage within a cell. A wireless service interface (106) coupled to the base station and its controller has a bandwidth allocator (108) to allocate bandwidth among transmit-receive multimedia and voice communications in response to requirements of wireless mobile units (col. 2, lines 33-47). Basu et al does not specifically teach E1 link.

In an analogous art, Yee et al teaches E1 link (paragraph # 0092). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Basu et al by specifically adding feature E1 link to support the multimedia call in order to enhance system performance of the system purpose of increasing efficiency telecommunication system as taught by Yee et al.

Regarding claim 13 Basu et al teaches determining whether the requested bandwidth is greater than a reference bandwidth, computing a bandwidth occupied by the connected data calls; subtracting the occupied bandwidth from a maximum allowable bandwidth for each H.sub.0 channel, to determine whether any available bandwidth exists in each H.sub.0 channel; and allocating an H.sub.0 channel having the least occupied bandwidth if no H.sub.0 channel exists (col. 2, lines 33-47, col. 3, line 38-col. 4, line 2, col. 13, line 55-col. 14, lines 30).

Regarding claims 14, 19 Basu et al teaches allocating an H.sub.0 channel

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having the least available bandwidth if the requested bandwidth is greater than the reference bandwidth and a H.sub.0 channel having available bandwidth exists; and allocating a H.sub.0 channel having the least occupied bandwidth if the requested bandwidth is smaller than the reference bandwidth and a H.sub.0 channel having available bandwidth exists (col. 2, lines 33-47, col. 3, line38-col. 4, line 2, col. 13, line 55-col. 14, lines 30).

Regarding claims 15,20 Basu et al teaches wherein the weight value is allocated in a unit form according to a rate of the requested bandwidth (col. 2, lines 33-47, col. 3, line38-col. 4, line 2, col. 13, line 55-col. 14, lines 30).

Regarding claim 17,22-24 Basu et al teaches wherein the maximum allowable bandwidth is 390 Kbps (col. 2, lines 33-47, col. 3, line38-col. 4, line 2, col. 13, line 55-col. 14, lines 30).

6. Claims 4,12,16,21 rejected under 35 U.S.C. 103(a) as being unpatentable over Basu et al (6097733) and further in view of Yee et al (20020114301) and Martin et al (5960039).

7. Regarding claims 4,12,16,21 Basu et al teaches significant Internet browsers when receiving HTML web pages often require data transmission. HTML web pages may include many kilobytes or megabytes of information (col. 9, lines 25-45). Basu et al and Yee et al does not specifically teach 128 Kbps-based high speed data call comprises 10 units.

In an analogous art, Martin et al teaches 128 Kbps-based high speed data call

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comprises 10 units (col. 7, lines 7-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Basu et al and Yee et al by specifically adding feature 128 Kbps-based high speed data to support the multimedia call in order to enhance system performance of the system purpose of increasing efficiency as taught by Martin et al.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAWAR IQBAL whose telephone number is 703-306-3015.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **BANKS-HAROLD, MARSHA**, can be reached at 703-305-4379.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231


or faxed to:

(703) 872-9314 (for Technology Center 2684 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Khawar Iqbal



**CHARLES APPIAH
PRIMARY EXAMINER**